

Public

CSNP: Appraising options

23 July 2025

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Introduction

Presentation includes:

- Focus on appraise for electricity
- Overview of how NESO will appraise GB electricity network designs made up of a range of network reinforcement options
- More detail in methodology
- Questions at end

NB – we'll record the presentation including Q&A

Please use Slido to ask questions

Code: ~7284629

We will moderate and answer questions that are relevant to CSNP and reflect a diverse perspective. You can also get in touch via (box.sep-portfolio@nationalenergyiso.com) for any specific consultation questions.



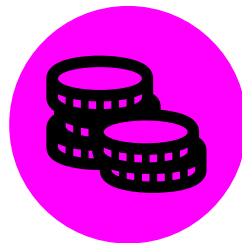
Centralised Strategic Network Plan (CSNP)

The CSNP will provide the **joined up strategic energy framework** needed for Great Britain to decarbonise our energy systems **to achieve net zero and support economic growth.**

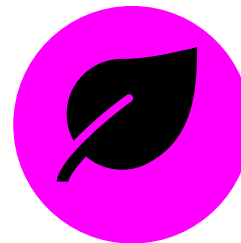
The CSNP serves as a **network blueprint for the country**, conducting analysis and setting out the most optimal locations for energy infrastructure projects.



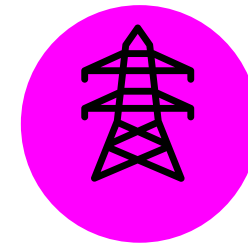
25-year horizon,
on a three-year
cycle



**Co-ordinate
reinforcements and
anticipate
investments
ahead of
infrastructure delivery**



Balance development
against **environment/
community impacts** to
maximise benefits



Understand energy
infrastructure needed for
**different energy vectors
for the future**



Whole system framework

1	Drive	The Strategic Spatial Energy Plan (SSEP) will be used and complimented by the Future Energy Scenarios (FES), by the CSNP to plan the energy networks required for the wider transfer of electricity, gas, and hydrogen.
2	Identify	The CSNP will provide a view of the current capability and future needs of the networks to inform network options development for each energy vector.
3	Develop	Considering each vector's system requirements, a range of reinforcement options will be identified and put forward by NESO, Network Owners, and broader parties, as appropriate.
4	Appraise	Options will then be assessed across multiple assessment criteria to determine the best design across GB. Required reinforcements will progress into the delivery phase.
5	Plan publication	A draft plan will be published, and a consultation window will provide an opportunity to shape the final CSNP publication. Where required, this will include statutory consultations for environmental assessments.
6	Deliver	Following publication of the final CSNP, the required reinforcements will progress through detailed design, consenting and delivery. An ongoing change control process will ensure delivery in line with the plan.



Assessment criteria

Criteria	Description
Economic efficiency	Use economic assessment tools to identify efficient designs which create consumer value.
Environmental impact	Use geospatial data and information across multiple impact themes to assess impact on the environment.
Community impact	Use geospatial data and information across multiple impact themes to assess community impact.
Deliverability	Consider supply chain factors, construction timelines, technology readiness, and complexities, including challenges from multi-project interactions, to ensure practical delivery.
Operability	Consider real-time operability challenges associated with the GB network design options.



Economic efficiency

During the appraise step, NESO will combine various reinforcement options identified in the develop step to create multiple GB network designs

- Calculate the Net Present Value (NPV) of each GB network design
- Forecast reduction in constraint costs due to the inclusion of reinforcements
- Forecast capital expenditure (CAPEX) and operational expenditure of the reinforcements
- Forecast reduction in the societal cost of carbon
- Consider a range of sensitivities to explore a wide range of network designs.



Environment and Community

Global
climate
regulation

Local
economy

Air
Quality

Recreation
&
tourism

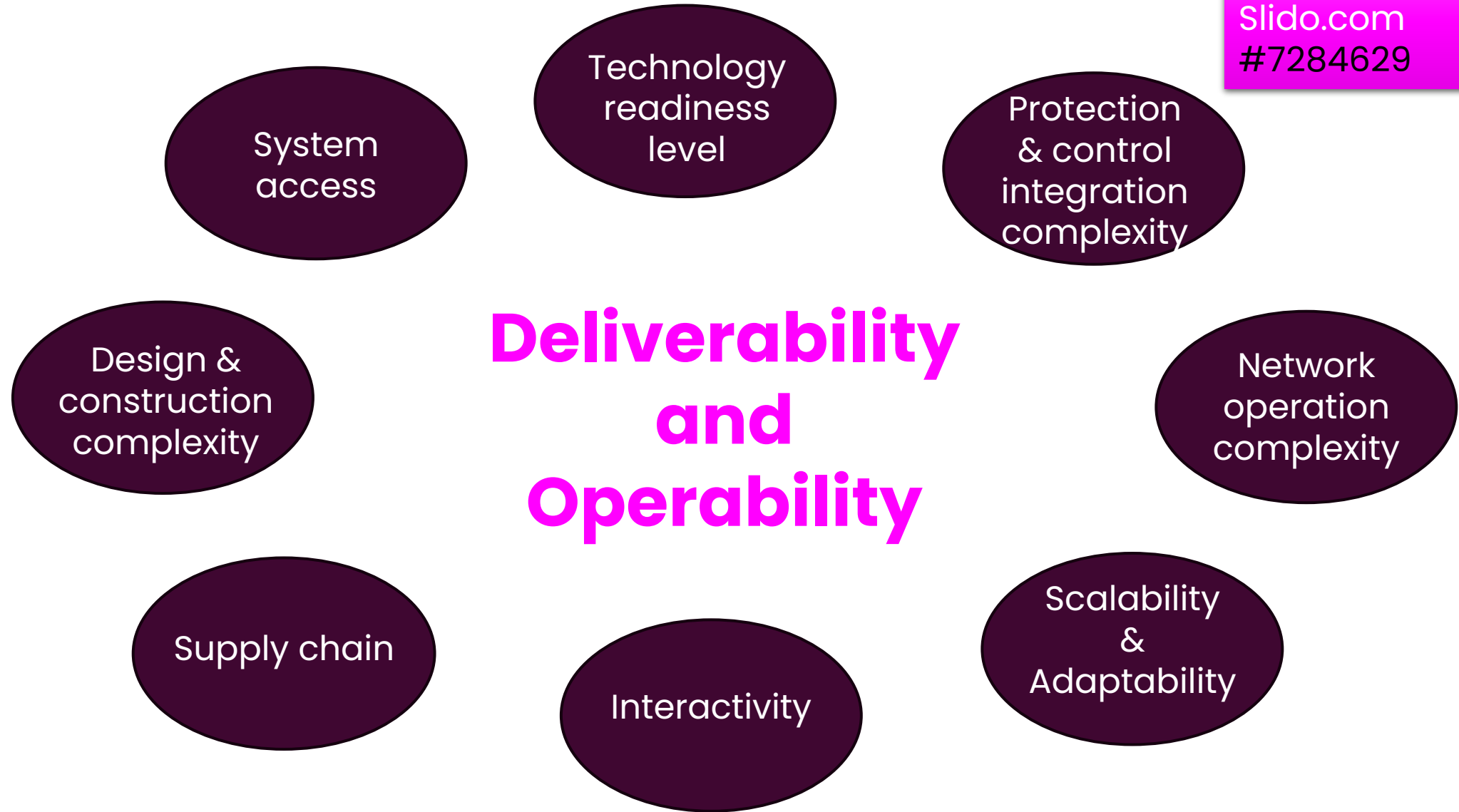
Community
amenities

Landscape
&
Seascape

Historic
environment

Flood risk

Ecology
&
biodiversity



Electricity consultation question: Do you agree with the sub-criteria listed? Are there any other sub-criteria that should be included?

Environmental Assessments

An integral part of the CSNP will be plan-level environmental assessments which will be undertaken across GB:

- Strategic Environmental Assessment – SEA
- Habitats Regulations Assessment – HRA
- Marine Conservation Zone – MCZ (MPA in Scotland)

These assessments will assess the potential environmental impacts of the CSNP.

They will help ensure the CSNP is designed and implemented in a way that seeks to minimise negative environmental effects, promotes sustainability, provides opportunity for stakeholder and public consultation, and provides necessary information for NESO to make informed choices on GB designs.

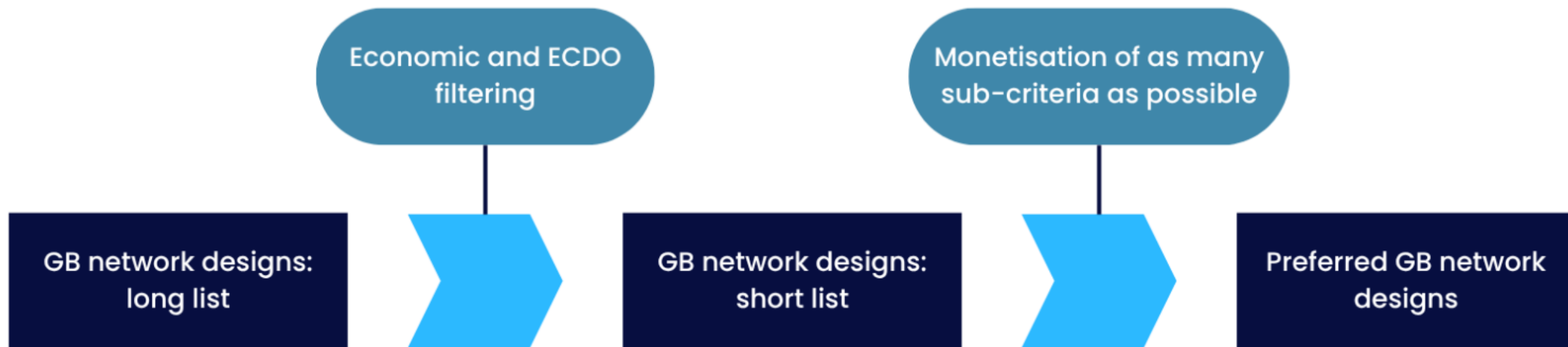
Join Q&A at
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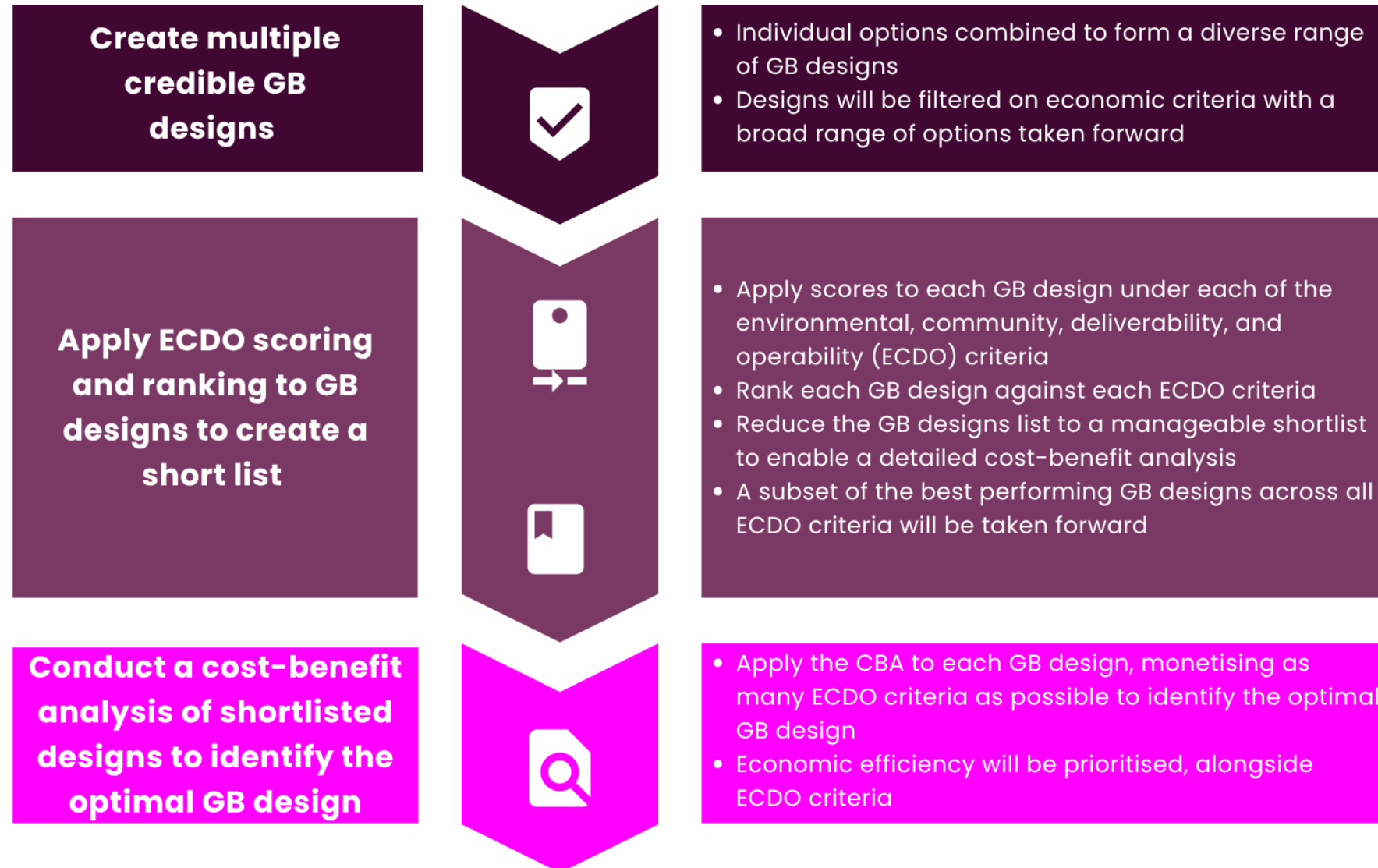


Appraisal framework





Key steps in the GB network design appraisal





What's changed? (1)

CSNP will provide greater transparency

We will produce a diverse range of credible GB designs

We will explain what is driving decisions regarding filtering and selection of preferred design

We will provide information and insight throughout the process

We are consulting on the entire methodology

We will ensure our stakeholder engagement enables participation from all interested parties

CSNP will be more robust

We will consider a broader range of assessment criteria, including economic, environmental, community, deliverability and operability

We will analyse network reinforcement options from Transmission Owners, NESO and 3rd parties



What's changed? (2)

CSNP will provide more
certainty

The delivery pipeline will ensure the network is planned strategically

Provide greater confidence to the energy industry and supply chains

Accelerate the delivery of network

Ensure that the GB energy network is developed holistically



Summary

- **Transparent, evidence-based approach**
 - Increased stakeholder and statutory environmental consultations
 - Extensive and accessible engagement for all stakeholders
- **Robust decision making**
 - Three-year planning cycle will allow for increased range of reinforcement option development and an expanded decision-making framework
- **Increased coordination**
 - Options to be considered more collectively to support longer-term, coordinated investments, as opposed to incremental decisions decided on an annual basis



Immediate next steps

Come along to our technical webinars to learn more about the specific aspects to the proposals.

Offshore Coordination	24 July	10am
Hydrogen planning	24 July	2pm

Leave us consultation feedback through our CSNP surveys:

[Whole system network planning](#)

[Electricity network planning](#)

[Gas network planning](#)

[Hydrogen network planning](#)

Consultation closes
1 August 2025



Final methodology
30 September

Public

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Question & Answer

Public

Thank you

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